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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/714,373	11/17/2003	Charles R. Abbruscato	5030-PAT-Abbruscato	1846
24337	7590	04/14/2006	EXAMINER	
MILLER PATENT SERVICES 2500 DOCKERY LANE RALEIGH, NC 27606			HELLER, TAMMIE K	
			ART UNIT	PAPER NUMBER
			3766	
DATE MAILED: 04/14/2006				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/714,373

Applicant(s)

ABBRUSCATO, CHARLES R.

Examiner

Tammie Heller

Art Unit

3766

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 November 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,6,7,13-16,21 and 23-25 is/are rejected.
- 7) ☒ Claim(s) 3-5,8-12,17-20,22 and 26 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 17 November 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 11/17/03.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Objections

1. Claim 24 objected to because of the following informalities: there is a lack of antecedent basis for the "local headset" because claim 24 is currently dependent on claim 21. However, claim 23 claims the "local headset", therefore the Examiner believes claim 24 was intended to depend from claim 23 and has considered it as such. Appropriate correction is required.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1, 2, 6, 14, and 15 are rejected under 35 U.S.C. 102(b) as being anticipated by Abbruscato (U.S. Patent No. 5,841,846, cited by applicant), herein Abbruscato '846. Regarding claim 1, Abbruscato '846 discloses an electronic stethoscope system which consists of a local stethoscope unit including a chest piece 14, a boost circuit 16, and an encoder 22 (see Figure 1). Further, the system includes a data communications channel 28 and a remote stethoscope unit including a remote receiving section 32 and a remote headset 46 (see Figure 1).

3. Regarding claim 2, Abbruscato '846 discloses low pass filter 18 which is included in the local stethoscope unit (see Figure 1). The examiner takes the position that due to the presence of the low pass filter, it is inherent that the local encoder has a cut-off

frequency approximately equal to the predetermined frequency used with the boost circuit.

4. Regarding claim 6, Abbruscato '846 discloses a second boost circuit 44 and a low pass filter 42 included in the remote receiving section (see Figure 1).

5. Regarding claim 14, Abbruscato '846 discloses an electronic stethoscope system which consists of a local stethoscope unit including a chest piece 14, a boost circuit 16, and an encoder 22 (see Figure 1).

6. Regarding claim 15, Abbruscato '846 discloses a headset 46 and receiving section 12 (see Figure 1). Further, the receiving section includes decoder 38, boost circuit 44 and low pass filter 42, the boost circuit and low pass filter being coupled between the decoder and the headset (see Figure 1).

7. Claims 1, 2, 6, 14, and 15 are rejected under 35 U.S.C. 102(b) as being anticipated by Grasfield et al. (U.S. 2002/0085724, cited by applicant), herein Grasfield. Regarding claim 1, Grasfield discloses a stethoscope system which consists of a local stethoscope unit including a chest piece 158, a boost circuit 168, and an encoder 182 (see Figure 7). Further, the system includes a data communications channel 32 and a remote stethoscope unit including a remote receiving section 152 and a remote headset (see Figure 7).

8. Regarding claim 2, Grasfield discloses low pass filter 286 which is included in the local stethoscope unit (see Figure 8A). The examiner takes the position that due to the presence of the low pass filter, it is inherent that the local encoder has a cut-off

frequency approximately equal to the predetermined frequency used with the boost circuit.

9. Regarding claim 6, Grasfield discloses a second boost circuit 216 (see Figure 7) and a low pass filter 348 (see Figure 8B) included in the remote receiving section.

10. Regarding claim 14, Grasfield discloses an electronic stethoscope system which consists of a local stethoscope unit including a chest piece 158, a boost circuit 168, and an encoder 182 (see Figure 7).

11. Regarding claim 15, Grasfield discloses a headset and receiving section 152 (see Figure 7). Further, the receiving section includes decoder 328, boost circuit 216 and low pass filter 348, the boost circuit and low pass filter being coupled between the decoder and the headset (see Figure 7 and 8B).

Claim Rejections - 35 USC § 103

12. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

13. Claims 7 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Abbruscato '846 or Grasfield in view of Abbruscato (U.S. Patent No. 5,550,902), herein Abbruscato '902. Abbruscato'846 and Grasfield disclose the invention essentially as claimed, including remote decoders 38 and 328 respectively, but fail to disclose a switch having an output coupled to the remote headset disposed in switching relationship with

a diaphragm input terminal and a bell input terminal. Abbruscato '902 discloses a remote stethoscope signal processing system which includes switch 57 having an output coupled to headset 61 which is disposed in switching relationship with a diaphragm input terminal and a bell input terminal (see Figure 1 and col. 5, ln. 39). Abbruscato'902 discloses that switch 57 is utilized in order for the attending physician to isolate a desired frequency range which corresponds to the detection of either heart and blood vessels sounds with the bell or respiratory sounds with the diaphragm (see col. 5, ln. 39-43). Therefore, it would have been obvious to one having ordinary skill in the art at the time of the invention to utilize a switch disposed in switching relationship with diaphragm and bell input terminals, as taught by Abbruscato '902, in the invention of Abbruscato '846 or Grasfield in order to enable the attending physician to isolate a desired frequency range which corresponds to the detection of either heart and blood vessels sounds with the bell or respiratory sounds with the diaphragm.

14. Claims 13, 21, and 23-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Grasfield in view of Sedgwick (U.S. Patent No. 4,528,690).

15. Regarding claims 13 and 21, Grasfield discloses the invention essentially as claimed, but fails to disclose that the chest piece assembly is detachably coupled to the local transmitting section. Sedgwick discloses a compact hybrid stethoscope which includes headpiece 12 detachably coupled to the local transmitting section (see Figure 1 and col. 2, ln. 67). Sedgwick discloses that the headpiece 12 is made detachable so that a physician may determine the optimal headpiece to be used for a particular patient

(see col. 3, ln. 1-5). Therefore, it would have been obvious to one having ordinary skill in the art at the time of the invention to make the chest piece 158 of Grasfield detachable, as taught by Sedgwick in order to allow the physician to tailor the stethoscope unit, and specifically the chest piece toward the specific patient being treated.

16. Regarding claim 23, Grasfield discloses base unit 22A which is used at the local station and base unit 22B which is used at the remote station (see Figures 2A and 2B). In Figure 4A, Grasfield discloses that the base unit 22 includes headphone jack 92. Therefore, Grasfield inherently discloses a local headset coupled to the chest piece assembly to receive the analog auscultation sound.

17. Regarding claim 24, in Figure 2A Grasfield labels all parts of the local unit with the denotation of "A" and in Figure 2B Grasfield labels corresponding parts of the remote unit with the denotation of "B". Therefore, it is inherent that corresponding parts between the local and the remote unit are identical in nature due to the numerical correlation between the parts.

18. Regarding claim 25, the system of Grasfield includes a data communications channel 32 which couples the local transmitting section to the remote receiving section (see Figure 7).

Allowable Subject Matter

19. Claims 3-5, 8-12, 17-20, 22, and 26 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tammie Heller whose telephone number is 571-272-1986. The examiner can normally be reached on Monday through Friday from 7am until 3:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert E. Pezzuto can be reached on 571-272-6996. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Tammie Heller

TKH

Carl N. Layno

CARL LAYNO
PRIMARY EXAMINER

for Robert E. Pezzuto, SPE